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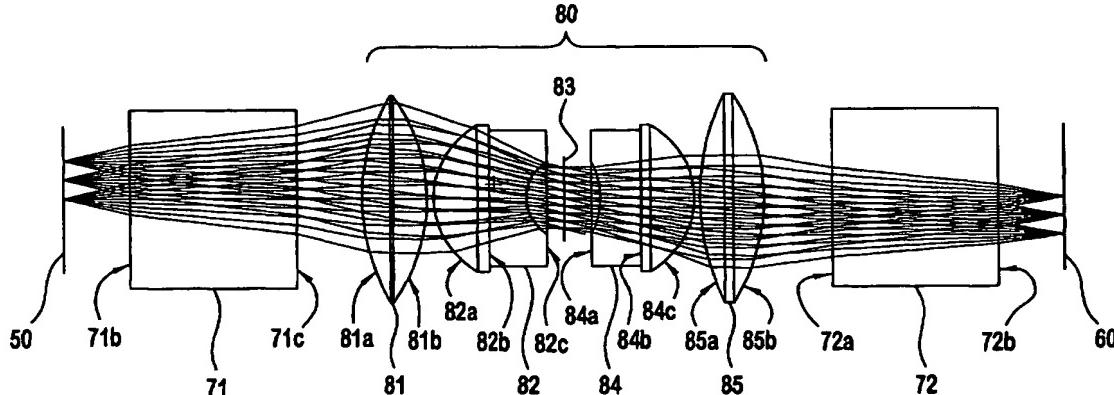
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(54) Title: IMAGER TO IMAGER RELAY LENS SYSTEM



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(57) Abstract: A lens system for use in a two-stage projection system that relays light output from a first imager on a pixel-by pixel basis onto a second imager (e.g. an LCOS). The lens system includes a double gauss lens set having a distortion of less than about 0.015% with at least about 90% of the light energy of a specific pixel projected within about a 15.4 micrometer square. Thus a projection system that enhances the contrast ratio for video images, particularly in the dark state, and reduces contouring artifacts, can be achieved.

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/38199

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 H04N5/74 G02B13/22

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 H04N G02B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, COMPENDEX, INSPEC, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 625 488 A (DIETZSCH CHRISTA ET AL) 29 April 1997 (1997-04-29) figures 3,4 column 4, line 31 -column 5, line 54 ---	1-16
A	US 6 339 503 B1 (WAKELIN SUZANNE ET AL) 15 January 2002 (2002-01-15) figure 5 column 1, line 34 -column 2, line 67 ---	1-16
X	US 5 625 495 A (MOSKOVICH JACOB) 29 April 1997 (1997-04-29) figure 10 abstract ---	1-16
X	US 3 391 968 A (BETENSKY ELLIS L) 9 July 1968 (1968-07-09) abstract; figure 1 ---	1-16
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Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	EP 0 385 698 A (MATSUSHITA ELECTRIC IND CO LTD) 5 September 1990 (1990-09-05) figure 1 page 2 -page 4 -----	1-16

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